AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application: (AS ON AMENDED SHEET(S) ANNEXED TO IPRP)

1. (Original) A compound of formula I, or a phannaceutically acceptable salt thereof,

wherein

Z is OR^1 or NR^1R^2 wherein each of R^1 and R^2 is independently H, or a hydrocarbyl group;

X is an alkylene, alkenylene, or alkynylene group, each of which may be optionally substituted by one or more substituents selected from alkyl, COOH, CO₂-alkyl, akenyl, CN, NH₂, hydroxy, halo, alkoxy, CF₃, and nitro;

Y is a polar functional group selected from OH, NO₂, CN, COR.³, COOR³, NR³R⁴, CONR³R⁴, SO₃H, SO₂-R3, SO₂NR³R⁴ and CF₃, where each of R³ and R⁴ is independently H or a hydrocarbyl group;

A is phenyl or pyridyl; and

B is $(CH_2)_n$ where n is 0;

with the proviso that:

- (i) when A is phenyl, and Z is OH, X-Y is other than $C \equiv C (CH_2)_2 OH$, $C \equiv C (CH_2)_2 CO_2 Me$, $(CH_2)_4 CO_2 H$; and
- (ii) when A is phenyl, and Z is OMe, X-Y is other than C≡C-(CH₂)₄OH; -(CH₂)₄-CHO, cis-CH=CH-(CH₂)₃OH, trans-CH=CH-(CH₂)₃OH; and wherein the compound is other thann 1-(N-octylcarbamoyl)methyl-3-carboxmidopyridinuim chloride, 3 -methylcarbamoyl-1-dodecyloxycarbonylmethyl-pyridinium or 6-aminomethylpyridine-2-carboxylic acid ethyl ester.
- 2. (Original) A compound according to claim 1 wherein Y is selected from ON, OH, COOR³, SO₂NR³R⁴, CONR³R⁴, where each of R³ and R⁴ is independently H or a hydrocarbyl group.
- 3. (Currently Amended) A compound according to any preceding claim 1 wherein each of R¹, R², R³ and R⁴ is independently H, an alkyl group, an aryl group, or a cycloalkyl group, each of which may be optionally substituted.
- 4. (Currently Amended) A compound according to any preceding-claim_1 wherein Y is selected from OH, CN, COOR³, CONR³R⁴, where each of R³ and R⁴ is independently H or an optionally substituted alkyl group.
- 5. (Currently Amended) A compound according to any preceding claim 1 wherein Y is selected from OH, CN, COOMe, COOH, CONH₂, CONHMe and CONMe₂.

6. (Currently Amended) A compound according to any preceding-claim_1 wherein X-Y is selected from

$$-C(R^5)=C(R^6)-(CH_2)_q-Y$$
; and

wherein each of R^5 , R^6 , R^7 , and R^8 is independently H or alkyl, and each of p, q and r is independently 2, 3, or 4.

7. (Currently Amended) A compound according to any preceding claim 1 wherein X-Y is selected from

-C
$$\equiv$$
C-(CH₂)_p-Y; and

wherein each of p and q is independently 2, 3 or 4.

8. (Original) A compound according to claim 6 wherein X-Y is cis-C(R⁵)=C(R⁶)-(CH₂)_q-Y and q is 2, 3 or 4.

- 9. (Currently Amended) A compound according to any one of claims 1 to 6 or claim 8 claim 1 wherein X-Y is -C(Me)₂-CH₂-(CH₂)_r-Y and r is 2, 3 or 4.
- 10. (Original) A compound according to claim 1 wherein A is phenyl.

- 11. (Currently Amended) A compound according to any preceding-claim_1 wherein Z is OR¹ or NR¹R₂ and each of R¹ and R² is independently H, an alkyl or a cycloalkyl group, each of which may be optionally substituted by one or more OH or halogen groups.
- 12. (Currently Amended) A compound according to any preceding-claim_1 wherein Z is selected from OH, OEt, NHCH₂CH₂F, NH-cyclopropyl, NHCH(Me)CH₂OH and NHCH₂CH₂OH
- 13. (Currently Amended) A compound according to any preceding claim 1 which is selected from the following:

U.S. National Phase of PCT/GB2005/000605

' OKUYAMA et al.

U.S. National Phase of PCT/GB2005/000605

14. (Original) The compound of claim 13 which is

15. (Original) The compound of claim 14 which is in the form of a racemic mixture.

16. (Original) Use of a compound of formula la, or a pharmaceutically acceptable salt thereof,

wherein

Z is OR¹ or NR₁R₂ wherein each of R₁ and R₂ is independently H, or a hydrocarbyl group;

X is an alkylene, alkenylene, or alkynylene group, each of which may be optionally substituted;

Y is a polar functional group;

OKUYAMA et al.

U.S. National Phase of PCT/GB2005/000605

Å is an aryl or heteroaryl group, each of which may be optionally substituted; and B is $(CH_2)_n$ where n is 0, 1, 2, 3, 4 or 5;

in the preparation of a medicament for treating a muscular disorder.

17. (Original) Use according to claim 16 wherein the muscular disorder is a neuromuscular disorder.

18. (Original) Use of a compound of formula la, or a pharmaceutically acceptable salt thereof,

wherein

Z is OR¹ or NR¹R² wherein each of R¹ and R² is independently H, or a hydrocarbyl group;

X is an alkylene, alkenylene, or alkynylene group, each of which may be optionally substituted;

Y is a polar functional group;

A is an aryl or heteroaryl group, each of which maybe optionally substituted; and B is $(CH_2)_n$ where n is 0, 1, 2, 3, 4 or 5;

in the preparation of a medicament for controlling spasticity and tremors.

OKUYAMA et al.

U.S. National Phase of PCT/GB2005/000605

19.(Original) Use of a compound of formula la, or a pharmaceuticaly acceptable salt thereof,

wherein

Z is OR1 or NR1R2 wherein each of R1 and R2 is independently H, or a. hydrocarbyl group;

X is an alkylene, alkenylene, or alkynylene group, each of which may be optionally substituted;

Y is a polar functional group;

A is an aryl or heteroaryl group, each of which may be optionally substituted; and B is (CH2)n where n is 0, 1, 2, 3, 4 or 5;

in the preparation of a medicarnent for treating a gastrointestinal disorder.

- 20. (Original) Use according to claim 19 wherein the gastrointestinal disorder is a gastric ulcer.
- 21. (Original) Use according to claim 19 wherein the gastrointestinal disorder is Crohn's disease.

- 22. (Original) Use according to claim 19 wherein the gastrointestinal disorder is secretory diarroehea.
- 23. (Original) Use according to claim 19 wherein the gastrointestinal disorder is paralytic ileus.
- 24. (Currently Amended) Use according to any one of claims 16 to 23 claim 16 wherein said modulator selectively modulates peripheral cannabinoid receptors.
- 25. (Currently Amended) Use according to any one of claims 16 to 24 claim 16 wherein said compound selectively modulates peripheral cannabinoid receptors over central cannabinoid receptors.
- 26. (Currently Amended) Use according to any one of claims 16 to 25 claim 16 wherein the compound binds substantially exclusively to peripheral cannabinoid receptors.
- 27. (Currently Amended) Use according to any one of claims 16 to 26 claim 16 wherein the compound is a cannabinoid receptor agonist.

- 28. (Currently Amended) Use according to any one of claims 16 to 27 claim 16 wherein the compound does not substantially agonise central cannabinoid receptors.
- 29. (Currently Amended) Use according to any one or claims 16 to 28 claim 16 wherein the compound is substantially excluded from the CNS.
- 30. (Currently Amended) Use according to any one of claims 16 to 29 claim 16 wherein Y is selected from NO2, CN, OR3, COR3, COOR3, NR3R4, CONR3R4, SO3H, SO2-R3, SO2NR3R4 and CF3, where each of R3 and R4 is independently H or a hydrocarbyl group.
- 31. (Currently Amended) Use compound according to any one of claims 16-30 claim 16 wherein Y is selected from CN, COOR3, SO₂NR³R⁴, CONR³R⁴, where each of R³ and R⁴ is independently H or a hydrocarbyl group.
- 32. (Currently Amended) Use according to any one of claims 16 to 31 claim 16 wherein the compound is as defined in any one of claims 1-15.
- 33. (Currently Amended) A method of treating a disorder associated with the modulation of peripheral cannabinoid receptors, said method comprising administering to a subject in need thereof, a therapeutically effective amount of a compound according to any one claims 1 to 15 claim 1.

- 34. (Original) A method according to claim 33 wherein said disorder is associated with peripheral cannabinoid receptor deactivation.
- 35. (Currently Amended) A method according to claim 33-or claim 34 wherein the compound binds substantially agonise central cannabinoid receptors.
- 36. (Currently Amended) A method according to any one of claims 33 to 35 claim 33 wherein the compound binds substantially exclusively to peripheral cannabinoid receptors.
- 37. (Currently Amended) A method according to any one of claims 33 to 36 claim 33 wherein the compound is substantially excluded from the CNS.
- 38. (Currently Amended) A pharmaceutical composition comprising a compound according to any one of cla claims 1 to 15 claim 1, or a pharmaceutically acceptable salt thereof, admixed with pharmaceutically acceptable diluent, excipient or carrier.
- 39. (Original) Use of a compound of formula la, or pharmaceutically acceptable salt thereof, as defined in claim 16 in an assay for identifying further compounds capable of modulating cannabinoid receptor activity.

40. (Original) Use according to claim 39 wherein the assay is a competitive binding assay.